DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 30, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending November 30, 2001

The Board and a staff team were here this week reviewing LANL-specific improvements and LANL support of safe, efficient, and effective nuclear weapon operations at Pantex.

Comprehensive Site Plan: This week, LANL briefed the staff on the Ten Year Comprehensive Site Plan submitted to DOE (9/26/01), including plans to decommission and dismantle excess facilities. LANL stated that in the late 1990s demolition activities nearly ceased here, that currently the laboratory has about 392,000 ft² of excess building floor-space, and that about 1 million ft² of building space needs to be removed during the next 5 to 10 years. The drivers are safety risks; increasing disposal costs; recurring surveillance and maintenance costs; and the desirability to construct new facilities on existing sites to mitigate environmental impacts. LANL stated that this now has senior DOE and LANL management attention, and that funding sources have been identified for dismantling about 90 percent of the currently listed excess facilities.

Success of the LANL plan depends on the proposed transfer of about 144,000 ft² of radiologically contaminated excess facilities from NNSA to DOE-EM in the FY 03/04 timeframe. This constitutes about 40 percent of the currently identified excess. Some of these facilities will soon become inactive, while others have been inactive for decades. Per LANL, EM now has no responsibilities for surveillance, maintenance, decontamination, or decommissioning of LANL contaminated facilities. It appears that near-term characterization, planning, and engagement between NNSA and DOE-EM – particularly identifying necessary funding – would be worthwhile to ensure the timely dismantlement of these facilities and the associated risk reduction.

Critical Experiments Facility (TA-18): LANL has identified corrective actions being taken in response to several technical safety requirement (TSR) violations earlier this year (site rep weekly 10/26/01). Steps taken include: a procedure/checklist highlighting TSR actions; two-person verification of certain TSR surveillances and calculations; TSR-focused management walkarounds; and an independent review of TSR-related corrective actions. Currently, LANL is preparing a new TA-18 authorization basis (AB) with new TSRs. Next year, LANL expects that implementation of the new AB will improve clarity, understanding, and interpretation of the requirements and reduce the number of such violations.

Weapons Engineering Tritium Facility (WETF): As reported last week, DOE and LANL have had difficulty in efficiently addressing some time-sensitive AB issues (e.g., TA-8-23). There are exceptions. In late October, WETF discovered that, if both normal and backup power were lost, the Uninterruptible Power Supply (UPS) would be unable to support its loads for 20 minutes, an AB requirement. Replacement batteries were not expected in time to support mission requirements. The UPS would supply emergency lighting long enough for evacuation. Subsequently, DOE received and approved in one day a Justification for Continued Operation to permit operations until the new batteries could be installed, provided backup power is fully available. The backup diesel generator has had only one recorded failure in more than a 10 years. This case was efficiently handled.